

Comments of MARTIN D. WADE, N5PZJ

**Before the Federal Communications Commission  
Washington, D.C. 20554**

**In the Matter of**

**Wireless Telecommunications Bureau and     )  
Public Safety and Homeland Security     )  
Bureau Seek Comment on Emergency     )  
Communications by Amateur Radio     )  
And Impediments to Amateur Radio     )  
Communications.     )**

**GN Docket No. 12-91**

To the Commission:

Formal Written Comments of MARTIN DAVID WADE, an Amateur Radio Operator holding License N5PZJ, Lafourche Parish, Louisiana, PO BOX 16, Galliano, Louisiana 70354.

To assist the Federal Communications Commission to carry out its mandate as charged by Pubic Law, **Middle Class Tax Relief and Job Creation Act of 2012**<sup>1</sup>, I wish to comment and guide these responses to strengthen the role The Amateur Radio Service plays in the Mitigation, Response and Recovery of a disaster incident in which Amateur Radio did, could or should have been called upon in a disaster. The assistance of Amateur Radio is in the Public interest and benefit serving to be in public interest and necessity to avoid unnecessary costs to the Commission, The United States of American and her friends and allies around the world and obstacles to public's safety and well-being at large.

**1. Importance of emergency Amateur Radlio Service communications. As noted above, the statute<sup>ii</sup> requires a review of the importance of emergency Amateur Radio Service communications relating to disasters, severe weather, and other threats to lives and property.**

**a. What are examples of disasters, severe weather, and other threats to life and property in which the Amateur Radio Service provided communications services that were important to emergency response or disaster relief? Provide examples of the important benefits of these services.**

I have personal experience in this area, I lived in the Strike Area for Hurricane Katrina in 2005 at Galliano, Louisiana which

my family and myself had evacuated on the Friday before the Hurricane struck the New Orleans, Louisiana area to the Rayne, Louisiana Civic Center situated Twenty Five (25) Miles west of Lafayette, Louisiana. By Saturday Afternoon, the Cell Network had become sporadic since the limited number of Cell Pair frequencies had been overwhelmed by the sheer number of Users desiring to place calls had overloaded the system and receiving or placing calls had become nearly impossible. Text Systems could get through with a delay which made the Text system the choice to get through on the commercial phone system. I was tapped by the local emergency group to assist in setting up an Amateur Radio Station since I had taken my equipment with me due to the fact I lived South East of New Orleans approximately Thirty-five (35) Miles. The response of the Lafayette, LA Amateur Radio in setting up at the Rayne Civic Center was overwhelming and the Amateur Radio using 7 MHz (40 Meters) Amateur band allowed us to contact the State EOC and other mass shelters to reunite family members. One case was when the Mother and Father of a 9 yr. old who had been bussed to RAYNE along with an Aunt and Uncle for transfer to Houston, TX and the 9 yr. old was at Baton Rouge with her cousin. Her family had been separated when being airlifted off houses in New Orleans East and the Family was spilt up by multiple airlifts by helicopters and taken to different staging areas. The ability to use an alternate communication system not tied to the Telephone/Internet system allowed us to contact directly and establish a message net not encumbered extraneous telecommunication hardware, there was nothing to slow down the exchange of information and since one station put out a call about the cousin and the 9 yr. old, we were able operate outside the envelope and allow the families to speak and set up a reunion.

Numerous amounts of traffic or messages were passed on behalf the Public, Governmental and Relief Agencies around Louisiana during this time. It was a group effort spearheaded by the Lafayette, Louisiana Amateur Radio Club which had their portable radio van available with a complete HF and VHF/UHF Setup, voice and digital with computer technology to use digital modes.

The stories are endless about Amateur Radio and its involvement with emergency situations. For detractors to say Amateur Radio is useless or ineffective ignores the obvious truth, Amateur Radio Operators, while it is a relaxing hobby, make up a solid corps of Men and Women who when called upon form the Largest Single Group of Radio Electronic knowledgeable found in the nation. Most will gladly lend a hand assisting in whatever effort is asked of them by their neighbors, friends, charity, or country.

**b. Under what circumstances does the Amateur Radio Service provide advantages over other communications systems in supporting emergency response or disaster relief activities?**

The problems of the Commercial Systems were exposed in KATRINA in 2006 and GUSTAVE in 2008 was apparent at my house in Galliano, Louisiana when my Cell Phone did not work, Radio & TV Stations went off the air, my phone did not work properly, Internet was not there, and Cable was out. The Satellite TV and Simple two way radio provided a link to the world and it worked! I was able to call from Coast to Coast without a problem via HF however; my neighbor could not call across the street! In KATRINA, the local telephone switch exchange in New Orleans, LA was under water and we could call local throughout the local exchange but not to the next exchange and this continued for Three (3) Weeks after landfall.

**This brings up the question of the advantage of Amateur Radio in supporting emergency response or relief activities in the first part:**

1. Amateur Radio Service is Frequency Agile in the way of The Amateur Service is allocated HF Spectrum in (10) bands below 30 MHz with the 5MHz being channelized. Each Frequency Band has its own characteristics as to Sky Wave Propagation, Ground Wave Propagation and band width. Each band characteristics allow for different uses at different times of the day and night, a thumbnail sketch of the HF BANDS available to the Amateur Radio are:

160 Meters <sup>iii</sup>	1.8 - 2.0MHz night
80 Meters	3.5 - 4.0MHz night and local day
60 Meters	5.3 MHZ (5 Channels) night and day
40 Meters	7.0 - 7.3MHz night and local day
30 Meters	10.1 - 10.15 CW and digital
20 Meters	14.0 - 14.350 world wide day and night
17 Meters	18.068 - 18.168 world wide day and night
15 Meters	21.0 - 21.450 primarily a daytime band
12 Meters	24.890 - 24.990 primarily a daytime band during sunspot highs
10 Meters	28.0 - 29.70 daytime during sunspot highs

2. The VHF/UHF portion allocated to Amateur Radio is very wide and has great potential for frequency agility since there are over 30+ Mhz of bandwidth available along with operating privileges for every mode, from CW, AM, FM, Digital and Television to Computer Linking. The following bands are available for Amateur Use:

<b>VHF :</b>	6	Meters	50 - 54MHz	local to world-wide
	2	Meters	144 - 148MHz	local and medium distance
	1.¼	Meters	222-225MHZ	local and medium distance
<b>UHF:</b>	70 cm (¾)	Meter	430 - 450MHz	local, TV and Satellite
	33 cm (1/3)	Meet	902-928MHz	

3. The Microwave bandwidth permitted to Amateur Radio Operator in the Microwave Bands are Ten (10) with everything above 300 Gigahertz free space. Here are linking and point to Point along with Wireless Internet and Satellite.

4. Amateur radio with slight exceptions is not frequency limited in the United States as to any particular jurisdiction as is a Commercial or Coordinated Part 90 Frequency in the industrial type or Public Safety areas.

5. Different modes, voice (AM, FM, SSB), digital, TV, facsimile just to mention a few. However, I find two way voice radios the most requested and used item in an emergency.

6. No cost to use.

**b. (cont.) Under what circumstances does the Amateur Radio Service complement other forms of communications systems for emergency response or disaster relief?**

1. Amateur Radio complements other forms of communications systems by the use of the known and ubiquitous AUTOPATCH which can marry the Radio and Telephone. This allows for areas without cell service to reach out and have contact since distant repeaters<sup>iv</sup> can be made available. A good example of this was when the Baton Rouge Repeater on 147.225 at 1300 Feet was used during KATRINA to coordinate and relay messages across Louisiana and Southern Mississippi.

2. Packet, Winlink, digital mailbox type programs can be linked or interfaced with email systems.

3. Most of the time, simple voice circuits taking the load off of business channels and systems performing Health and Welfare, routine traffic and specialty message on a specific item is the usage for Amateur Radio, Just freeing limited radio channels in an emergency.

4. This only limited by our imagination and need, some of the problems faced were getting information from Place A to Place B, intact and getting a reply, Amateur Radio usually complements every communication set up in an emergency when trained, disciplined operators are in place.

**c. What Federal Government plans, policies, and training programs involving emergency response and disaster relief currently include use of the Amateur Radio Service? What additional plans, policies, and training programs would benefit from the inclusion of Amateur Radio Service operations? How would Amateur Radio Service operations fit into these plans and programs?**

Most amateurs in the New Orleans area evacuated with their Amateur Radio “Ham” Gear and were ready to set up even though they had lost their antennas and were using wire strung between two trees, they were back on the air! As an Amateur Radio Operator, I was not contacted by anyone about Emergency Service until Katrina had hit and the situation had escalated into a full blown Rout of people leaving the New Orleans area and arriving at my location at Rayne, Louisiana Civic Center, an ad-hoc evacuation refuge provided by the wonderful citizens of Rayne, Louisiana. Had we had a comprehensive system of Emergency Registration, the location of Amateur Operators would have been made known if a central State or regional staffing center would have been established as well as for Utility and Telecomm Workers needing to restore vital services. It would behoove the Commission to establish a guideline for disaster recovery as a condition of grant of license to the state to establish a coordination feature in their Emergency Plan as a condition of licensure.

1. From what I can see, very little is said of Amateur Radio in most FEMA Instructions and pamphlets except to say it’s a good idea. One plan I have seen was dated 2004 in circulation on the internet.<sup>v</sup> A treatise on Amateur Radio supporting emergency operations was put forth in “EVALUATING LOCAL

AMATEUR RADIO OPERATORS AS A POSSIBLE AUXILIARY COMMUNICATIONS RESOURCE IN EMERGENCY RESPONSE” by Robert J. Byerly, Cottage Grove, Minnesota, National Fire Academy, April 2005.<sup>vi</sup> This treatise brings together several good points and looks at the Assistance which the Amateurs can provide.

Otherwise, FEMA has given Amateur Radio mention in its guidelines but has not expounded on Amateur Radio as a Resource.

2. To FEMA’s credit, the online courses fill the bill and I have taken courses from the FEMA WEBSITE, <http://training.fema.gov/IS/crslist.asp> and found them to be very well suited to internet teaching methods to getting people trained. EMI,<sup>vii</sup> the training arm of FEMA could develop Amateur Radio training geared toward fulfilling the NIMS and ICS requirements. The requirements for training NIMS/ICS at this time can get cumbersome and should be taught en masse to your volunteers to set the stage for the volunteer to understand the ICS system.

This could be tied in with the CERT Training by TRAINING THE TRAINOR which would help the planners to mesh Amateur Radio into the plans without incurring a lot cost or overhead. Training could be done in a pyramid fashion with the Message of Safety being spread quickly and with cost effectiveness.

One Federal Government initiative towards Amateur Radio would be take the Federal Amateur Call sign, ULS DATABASE and cross reference over to the Driver License/NCIC records as to check instant validity of Radio Operation Licenses/Privileges.

### **Credentialing of workers and responders:**

3. Because there was no state, or national recognition from Louisiana (for Example) for identification, other than the license from the FCC, the communications Volunteer resource appears to be a risk or threat, rather than an asset. Recognition of amateur radio by FEMA, Department of Homeland Security and others, in more than a **token** fashion would allow the largest group of trained communicators in the United States of America and a distributed resource, to do what they are trained to do and what they like to do. You have gone to the expense and trouble to license them to do just that, and the roadblocks to their use continue to exist year after year.

**d. What State, tribal, and local government plans, policies, and training programs involving emergency response and disaster relief currently include use of the Amateur Radio Service? What additional plans and programs would benefit from the inclusion of Amateur Radio Service operations? How would Amateur Radio Service operations fit into these plans and programs?**

1. It is the primary duty of local and state/territorial/tribal government to train, manage and carry out their emergency plans, set up the plan and recruit the local volunteers so it would benefit the locality to include Amateur Radio in their emergency planning.

First policy would be having a known group volunteer roster assembled so that anyone assuming leadership/responsibility role in an emergency incident would have a list with contact information.

Second Policy; train your group as to know their capabilities and limitations. By knowing the group's ability and limitations will make the plan realistic and eliminate surprises caused by assumption and/or false expectations at a time when actual response is needed to a widening incident. This will prevent the total team from looking ineffective by having a response group not able to fulfill the mission.

Third, critique your plan and retrain and refine, only by honing a KNOWN group can a realistic expectation be reached.

2. The Emergency Plan for Lafourche Parish, Louisiana covers Amateur Radio Operation in the following items taken from the Public Emergency Plan:<sup>viii</sup>

5. Some spontaneous voluntary support of ham radio operators, radio clubs, and private organizations with sophisticated communications equipment may occur.

D. Methods the Emergency Operation Center uses to communicate by agency:

3. Mass care facilities

a. Amateur Radio Clubs

b. Commercial telephones

c. Cell phones

d. Radios

9. State Emergency Operations Center

a. Radios

- b. Amateur Radio Clubs
- c. Commercial telephones
- d. Satellite phones
- e. Facsimile

The Emergency Plans for most areas are written in generic form to satisfy the rule a plan must be submitted, without any guidance for the use and development of volunteers in the Amateur Radio community. The Amateur Radio Community has always been ready to lend a hand in an emergency but depending on “spontaneous support” is a recipe for a disaster in a disaster.

3. FEMA/DHS should develop their training programs for State and local applications in conjunction with local amateur groups as to create realistic response plans. Mainly we need volunteers who are Amateur Radio Operators along with the Amateur radio Operators who volunteer!

**e. What changes to the Commission’s emergency communications rules for the Amateur Radio Service (Part 97, Subpart E) would enhance the ability of amateur operators to support emergency and disaster response? In addition, are there any specific changes that could be made to the technical and operational rules for the Amateur Radio Service (Part 97, Subparts B, C, and D) that would enhance the ability of amateur operators to support emergency and disaster response? What other steps could be taken to enhance the voluntary deployment and effectiveness of Amateur Radio Service operators during disasters and emergencies?**

#### Suggestions on how to make Amateur Radio more responsive<sup>ix</sup>

##### 1.

The Honorable Commission should take a look and revise the (RACES) Radio Civil Emergency Service<sup>x</sup> Part 97.407 to fit in the overall picture of emergency Communications by:

- A. Revise the definition of Civil Defense Organization to read “Emergency Management Office” or “Homeland Security” in order to reflect the current status of Emergency Response Offices and to change the word “enrolled” to “credentialed” to indicate the status of the Station License Holder in the Amateur Radio Service.
- D. Insert that any frequency so designated By Homeland Security, FEMA, DOD<sup>xi</sup>, NTIA or FCC may be used as Needed when conducting Operations in RACES.
- E. Update and modify the rule set under which stations Amateur Radio License Holders operating under RACES may communicate to include any station without limitation in any radio service upon authorization by the responsible Emergency Management Official:

1. Any RACES Station.
  2. Any Amateur Station having Emergency Traffic.
  3. Any Station in any Commercial or Private Service having Emergency Traffic without Frequency limitation.
  4. Any Military Station when authorized.
  5. Any Station in the Service of the Federal, State or Local Government Operating under FEMA, Office of Homeland Security or other Government Agency when authorized.
- F. Expand the authority of All communications transmitted during RACES while not only must they be authorized but do not limit the type and scope but allow for the passing or handling of Emergency Commercial Traffic also which will allow relief and commercial recovery to begin when essential equipment can be requested by Amateur Radio when no viable means of communications exist. This is the intent of Part 97.407 and should be explicitly stated for RACES Operations. This is the intent of Subpart E of Part 97 and should be reviewed by the Commission as time permits.
- G. Allow for drills longer than One Hour per week since this rule was Adopted to prevent Operators under the guise of RACES to monopolize Frequencies while conducting drills, flexibility is needed to allow for realistic drills and tests. Modify Title 47 Part 97.407(c)(4).to allow for drills without a time limit since this rule is no longer needed to control Non-Amateur Operation in RACES.
- H. Mandate the issuance of RACES STATION LICENSES to each EOC with the caveat that the Political Subdivision must have a viable RACES Back-up Emergency Plan before the Governmental Jurisdiction is able to apply for or renew their licenses in any other service. This would force the Political Subdivision to have a workable Back-up Communication plan under Commission/DHS/FEMA review.

## Concerning the handling of waivers, requests and STAs

### 2.

The Rules should be modified under Title 47 to allow the EIC<sup>xii</sup> or his designate of the Area Involved to be moved and stationed at the nearest safe EOC either at the State or Regional level to issue for the duration of the Emergency so as to issue STAs and to waive requirements in regard to Commission Actions to meet the Emergency and to minimize its effect on Communication efficiency during an Emergency. An EIC or his designate with authority to issue STAs should be made a part of every State Team when an Emergency has been declared. This would allow for maximum flexibility to speed recovery when there is an FCC official on the ground to expedite waivers and STAs when

*Amateur/Broadcast/Wireless/Cellular/Internet/Telephony* issues need immediate addressing as was the case in KATRINA. This alone would streamline the STA process and allow for a central point of contact during an emergency with an FCC Official capable of making emergency decisions. The idea of automatic waivers and STAs during a declared emergency appears to be a panacea but each emergency brings its own challenges and requirements, blanket grants of authority would not work since different scenarios may be at work but not carried in the plans.

The commission should be well aware amateur radio stood out as a source of successful communications in the involved areas from the documents "A Failure of Initiative" from the House of Representatives and "The Federal Response to Hurricane Katrina: Lessons Learned" from the White House.

You should also be aware of Public Law 103-408 acknowledges that Part 97 of Title 47 of the Commission's Regulations clarifies and extends the Purposes of The Amateur Radio Service as a:

- (1) voluntary noncommercial communication service, particularly with respect to providing emergency communications;
- (2) contributing service to the advancement of the telecommunications infrastructure;
- (3) service which encourages improvement of an individual's technical and operating skills;
- (4) service providing a national reservoir of trained operators, technicians and electronics experts; and
- (5) service enhancing international good will;

Congress finds and declares that--

- (1) radio amateurs are hereby commended for their contributions to technical progress in electronics, and for their emergency radio communications in times of disaster;
- (2) the Federal Communications Commission is urged to continue and enhance the development of the amateur radio service as a public benefit by adopting rules and regulations which encourage the use of new technologies within the amateur radio service; and
- (3) reasonable accommodation should be made for the effective operation of amateur radio from residences, private vehicles and public areas, and that regulation at all levels of government should facilitate and encourage amateur radio operation as a public benefit.

Support for Amateur Radio and the adoption of the Common Sense Regulations for handling emergencies should be priorities at the Commission on their report to Congress and to keep a review ongoing of the Amateur Regulations to make changes as needed to adapt to changes in technology. This will assist Amateur Radio Operators to get the job done. While Amateurs can not do it all, their presence in the Community lends itself to preparedness to a degree of readiness if they are used and integrated into the fabric of the Emergency Plan.

The fallacy of the Commercial Systems were exposed in KATRINA at my house in Galliano, Louisiana when my Cell Phone did not work, Radio & TV Stations went off the air, my phone did not work properly, Internet was not there, and Cable was out. The Satellite TV and Simple two way radio provided a link to the world and it worked! I was able to call from Coast to Coast without a problem via HF however, my neighbor could not call across the street!

Did I suffer damage, yes, but most amateurs in the New Orleans area evacuated with their Amateur Radio "Ham" Gear and were ready to set up even though they had lost their antennas and were using wire strung between two trees, they were back on the air! As an Amateur Radio Operator, I was not contacted by anyone about Emergency Service until Katrina had hit and the situation had escalated into a full blown Rout of people leaving the New Orleans area and arriving at my location at Rayne, Louisiana Civic Center, an ad-hoc evacuation refuge provided by the wonderful citizens of Rayne, Louisiana. Had we had a comprehensive system of Emergency Registration, the location of Amateur Operators would have been made known if a central State or regional staffing center would have been established as well as for Utility and Telecomm Workers needing to restore vital services. It would behoove the Commission to establish a guideline for disaster

recovery as a condition of grant of license to the state to establish a coordination feature in their Emergency Plan as a condition of licensure.

### **The Need for other High-Low Tech Solutions**

#### **3.**

Simple, non-complex Communication devices did perform very well during and after Katrina if their basic infrastructure remained intact which is the key to Communications Success. A complex communication system will experience a breakdown under extreme situations if any part of its myriad components fails. This makes the case for simplicity and equipment easy enough for the lay person, whose only experience with Telecommunications is dialing the cell phone or pushing the mike button to talk to minimize the problems they may encounter in performing their tasks during a crisis, communication infrastructure is best kept simple and ready to function with a back up plan always in place such as a team of trained persons to assist such as an Auxiliary Communications Team made up of Volunteers and Professionals ready to serve. To this end, adoption of the flexible approach by the Commission to Emergency Response is hereby urged.

### **The Need for Speed**

#### **4.**

The data transmission rules as mentioned in 97.307 should be revisited and made flexible to allow for faster digital speeds and modes, namely above 50 Mhz to assist Amateurs using digital modes to connect at speeds compatible with modern computers.

### **Spread spectrum and Scrambling or obscuring the Meaning of the message.**

#### **5.**

Allowing the domestic Amateur Radio Operator to use scrambling while engaged in emergency service or relief with the idea in mind that HIPPA <sup>xiii</sup> rule about patient confidentiality when a person's medical record is being discussed would be a great improvement to assisting emergency communications. Allow Spread Spectrum and Scrambling on a domestic call since International Regulations prohibit such communications on Amateur Frequencies but wholly in the United

States, this would assist Emergency Medical Providers who resort to using Amateur Radio in an emergency to fulfill the intent of the Hippa Rule.

Safeguards would have to instituted:

- A. Identification of Stations in plain language or CW.
- B. Log of communications detailing transmission info (NO HIPPA INFO TO BE RETAINED as per HIPPA Law) to kept with Station records for 1 year.

**f. What training from government or other sources is available for Amateur Radio Service operators for emergency and disaster relief communications? How could this training be enhanced? Should national training standards be developed for emergency communications response?**

1. ARES® (Amateur Radio Emergency Service) by the ARRL<sup>xiv</sup> has set up a training program for its volunteers of which I am proud to be a member. This training covers the many facets of volunteering for an organization be it, Private or Governmental in nature. FEMA has many courses available from its online EMI provider at no cost to the public.
2. The area where training is needed is to integrate Amateur Radio into the fabric of Emergency Response and one of those areas would be to have a FEMA/EMI online course to prepare potential candidates to pass the Technician and General Class Amateur Test. The purpose of this study material would be to prep candidates for taking the test. However the test would still have to and should be taken before (3) Three VE (Volunteer Examiners) as to protect the integrity of the examination process.
3. Minimal National Standards should be adopted and applied by FEMA/DHS/FCC with penalties built in for not following the National Master Plan. Plan should introduce Amateur Radio to the Emergency Response Team as well as describe the Emergency Process to the Amateur Community. ICS 100, IS 200 do introduce the volunteer to the Incident command System but most first responders and emergency management members do not have an introduction to Amateur Radio and confuse CB Radio with Amateur Radio. This causes many mixed feelings and misunderstandings as well as missed expectations about what is Amateur Radio.

**g. What communications capabilities, e.g., voice, video, or data, are available from future technical innovations that might further improve the Amateur Radio Service?**

Mostly what is needed in a Response is plain vanilla voice to lighten the loads off Official Channels, i.e. Firefighter, Police, Local government, etc. to handle Routine and Health and Welfare type traffic for the most part. I have used a packet set up to digi into an area where the Amateur was monitoring a computer, I have a 906 MHz Television Transceiver which we covered over 40 Miles on 5 Watts. I have used digital and analogue systems, voice and digital, worldwide packet, EME and Satellite,

Our methods are only limited by our imaginations, Amateur Radio is first and foremost an EXPERIMENTAL RADIO SERVICE also.

I would like to see more interconnection between the Internet but the Amateur Community is very tech savvy and will adapt to new technologies as they come along. I ask the Commission to be very flexible in its regulatory oversight as new technology comes online.

**h. Are national standards in data transmission needed to enhance the ability of Amateur Radio Service operators to respond to emergencies and disasters? Are there restrictions with regard to transmission speeds that, if removed, would increase the ability of operators to support emergency/disaster response? If so, what issues could arise from removing these restrictions?**

- 1, National Standards such AX.25, APCO 25 and others should be made freely available throughout the Telecommunications Industry to make radios able to receive signals seamlessly and use transmission standards that enhance the quality and quality of the signal, increase throughput by compressing bandwidth and allow for add on capability.
2. Transmission speeds and Bandwidth should be as wide as possible to allow for rapid delivery and reception of digital traffic, new protocols in digital transmission will need to be introduced in the regulatory scheme and the Commission should be as flexible as possible to insure these protocols are permitted as soon as possible.
3. The NEED FOR SPEED only enhances the Amateur Radio Value for Emergency Service since we can use the greater throughput to move information faster on behalf of our served public.

**i. Would it enhance emergency response and disaster relief activities if Amateur Radio Service operators were able to interconnect with public safety land mobile radio systems or hospital and health care communications systems? What could be done to enable or enhance such interconnections? What issues could arise from permitting such interconnections?**

1. It would enhance the value of Amateur Radio to emergency response and disaster relief to allow the interconnection with Public Safety Mobile Radio or hospital/health care yet with a caveat, we, The Licensees and The Commission must be vigilant to not allow the Using Agencies to abuse the Amateur Radio Service or Frequencies by using the Service for a period of time any longer than necessary to return to ordinary commercial and governmental circuits/services/frequencies. Some entities might be tempted to use Amateur Radio with its myriad of capabilities and modes and we must make sure rules are in place to safeguard the Service from abuse.
2. The interconnection should only be permitted under a Control Operator<sup>xv</sup> with the control operator ready to intervene if the need should arise. Since the commercial nature of Emergency Response is permissible on Amateur Radio during an emergency, this only seems to follow this should be permitted with proper oversight.
3. The issue mainly is two part, First is the Control Operator who must be present and secondly to prevent commercial or Long term use of Amateur frequencies when Commercial/Government systems are available.

**j. Should there be national certification programs to standardize amateur radio emergency communications training, mobilization, and operations? How would such programs improve emergency communications?**

1. Training should be standard for volunteers with online courses and/or courses taught by State or local trainers which emphasize the integration of the volunteer with his or her duties. The ICS/NIMS courses are an ideal platform for this integration and understanding.
2. Credentialing workers and responders in any emergency is an Art and a Science in itself since each Jurisdiction, whether at the Federal, State or Local level has their own requirements and ideas about what information should be contained, what standards should use and on what authority should the Credentials or ID Cards be issued. This is outside the scope of the Commission's Authority since a National Credential Standard<sup>xvi</sup> would need to be adopted and placed into Law by Congress. Resistance to credentialing was very evident during Katrina and passes were required to travel from point to point with workers and relief agency personnel having to prove themselves to each and every checkpoint,

something not unlike a police state by where the examining Officer had discretion. Some Officers were satisfied by the patchwork of Identification Cards (ID) s, but others wanted to question each person wanting a pass which blocked up traffic and slowed down entry. Not knowing what to accept, some accepted anything, others, nothing. The Commission should examine its Authority and Jurisdiction in this matter and refer this matter to FEMA and/or Office of Homeland Security/Congress to set down the Standards by which Credentials should be issued.

Security immediately after Katrina was a concern with lawlessness being rampant. The Commission needs to recommend to Congress to amend the Stafford Act to include Telecommunications workers and relief agencies under the Stafford Act to facilitate Security during Recovery.

**2. Impediments to enhanced Amateur Radio Service communications. The statute also requires that the study identify impediments to enhanced Amateur Radio Service communications and recommendations regarding the removal of such impediments.**

**a. What private land use restrictions on residential antenna installations have amateur radio operators encountered? What information is available regarding the prevalence of such restrictions? What are the effects of unreasonable and unnecessary restrictions on the amateur radio community's ability to use the Amateur Radio Service? Specifically, do these restrictions affect the amateur radio community's ability to respond to disasters, severe weather, and other threats to lives and property in the United States? What actions can be taken to minimize the effects of these restrictions?**

I, Martin D. Wade,<sup>xvii</sup> am very familiar with land use regulations in Louisiana by virtue of my Appointment as Notary Public<sup>xviii</sup> in Louisiana under its Civil Law Regime.<sup>xix</sup> I also hold a Salesmen's Real Estate License in Louisiana. I have seen many "Deed Restrictions" or Covenant Restrictions as they are called in Common Law States. I am not aware of a successful suit against a Radio Amateur in Louisiana since the (2) Two Year Liberative Prescription<sup>xx</sup> works against plaintiffs since there only a (2) Two Years from the date of First Use of an Antenna, most people delay in filing an objection and lends itself to weak deed restrictions in Louisiana. Other Jurisdictions may be different as the time frame the restriction is removed by non-action.

I do not live on Deed Restricted Property in Louisiana.

However I have run across several examples of restrictions which restrict Amateur Radio Operation by forbidding the Operation of "HAM" Radio which seem to have a common thread,

not the placement of Antennas and their size but to stop **TRANSMISSION** of any signals from a "LICENSED" Amateur Radio Station permitted by the Federal Communications Commission to prevent RFI to devices which usually under Part 15 of the Commission Rules from being interfered with which appears, Prima Facie, to circumvent or supersede Commission rules on RFI enforcement which by the FCC acquires exclusive right to enforce by the following.<sup>xxi</sup>

**The Conference Substitute is further intended to clarify the reservation of exclusive jurisdiction to the Federal Communications Commission over matters involving RFI. Such matters shall not be regulated by local or state law, nor shall radio transmitting be subject to local or state regulation as part of any effort to resolve an RFI complaint.**

Since the venue for enforcing the inchoate rights under a Deed Restriction regime as a private contract lie within the Province of the State or Local Court System, then by inference, local courts shall be prohibited by those things declared under the rule created by the ruling in **FIDELITY FEDERAL SAVING AND LOAN ASS'N vs. de la CUESTA, 458 US 141, 153 (1982)** so that Congress did not intend for the states to supplement it. Ergo, the enforcement against the OPERATION, TRANSMISSION, MAINTANCE or INSTALLATION of Amateur Radio Apparatus should be revisited while Antennas may be in question, any part of an Amateur Radio Station not an outside Antenna cannot be part of the restrictions.

The following restrictions have been gleaned from the records, their respective clauses bringing up questionable practices has been en-boldded, the recording or location information is noted by the endnotes on each different inscription:

8. (d) The installation, maintenance or operation of any short-wave radio stations, **commonly known as "ham" stations**, shall be prohibited. In addition, any television, stereo, or other type of antenna or satellite dish that extends for more than five (5) feet above the highest eave of the respective residence shall be prohibited.<sup>xxii</sup>

#### **7.02 ANTENNAS**<sup>xxiii</sup>

No exterior radio, television, satellite or communications antenna, aerial or dish shall be erected or maintained in the Subdivision without the prior, written approval of the Architectural Control Committee. **No amateur or "ham" radio transmitters shall be operated in the Subdivision without the prior, written permission of the Architectural Control Committee.**

4.21 Antennas, Outside Lighting and Outside Sound. No outside aboveground lines, outside television antennas, radio antennas, or hanging devices shall be allowed without prior written consent of the Committee. Antennas will under no circumstances be allowed to be placed in front of the farthest front or side extension of the residence or garage on any Lot. Construction, location and maintenance of outside lighting, outside music or sound producing devices and their outside mechanical devices shall be subject to the prior written approval of the Committee.<sup>xxiv</sup>

“L. ANTENNAS. No antennas or aerials shall be placed upon residences except one outdoor television antenna to provide normal TV reception. **No ham radios or radio transmission equipment shall be operated or permitted to be operated in the Subject Property.**”<sup>xxv</sup>

8. (d) **The installation, maintenance, or operation of any shortwave radio station, commonly known as “ham” stations, is prohibited.**<sup>xxvi</sup>

14. No outside television, radio, or other electronic towers, aerials, antennae, satellite dishes or device of any type for the reception or transmission of radio or television broadcasts or other means of communication shall hereafter be erected, constructed, placed or permitted to remain on any Lot or Tract or upon any improvements thereon, unless expressly approved in writing by the ARC, except that this prohibition shall not apply to those antennae specifically covered by 47 C.F.R. Part 1, Subpart S, Section 1.4000, as amended, promulgated under the federal Telecommunications Act of 1996, as amended from time to time. The Association shall be empowered to adopt rules governing the types of antennae, restrictions relating to safety, location and maintenance of antennae. The Association may adopt and enforce reasonable rules limiting installation of permissible dishes or antennae to side or rear yard locations, not visible from the street or neighboring properties, and integrated with the Residence and surrounding landscape, to the extent that reception of an acceptable signal would not be unlawfully impaired by such rules. Antennae shall be installed in compliance with all federal, state and local laws and regulations, including zoning, land-use and building regulations. A flagpole, for display of the American Flag only, may be permitted if its design and location are first

approved by the Association. An approved flagpole shall not be used to mount an antenna. **This provision is intended to protect residents from unreasonable interference with television reception, electronic devices, and the operation of home appliances, which is sometimes caused by the operation of ham radios, CB base stations or other high-powered broadcasting equipment. The golf courses are considered as neighboring property.**<sup>xxvii</sup>

Commenter: CC&R or Restrictions have many sides and angles but the simple facts put forth by other commenters to this inquiry are not in dispute as to widespread use of Restrictions to limit Antennas and the amount of HOA which restrict, curtail or limit amateur radio activity.

To the persons who declare Restrictions to be simple business contracts, there is not any leeway in negotiations since the restrictions are place of records in Conveyance or Deed records of a County or Parish sometimes years before. Is it fair to a 12 year old who is interested in the Radio Arts, obtains his or her license, to only be denied the ability to obtain and use Amateur Equipment due to restrictions placed in place before his or her birth? It is in the public interest, convenience and necessity to restrict Amateur Radio prohibitions since Amateur Radio is vital to the National Interest of the United States of America.

**b. What criteria distinguish “unreasonable or unnecessary” private land use restrictions from reasonable and necessary restrictions? How do local circumstances, such as neighborhood density or historic significance, affect whether a private land use restriction is reasonable or necessary? How does the availability of alternative transmitting locations or power sources affect the reasonableness of a particular private land use restriction?**

**COMMENTS by Martin D. Wade, Commentator:**

**The following post taken off the Internet on deed restrictions illustrates why HOAs and DEVELOPERS desire to restrict Antennas as to prevent interference and mayhem cause by persons like “Iceman” who is the reason for restrictions, for this reason a response to modifying the HOA and RESTRICTION rule should be crafted to avoid problems caused by Non Amateur Operations.**

## **AS FOLLOWS:**

“ICEMAN” Posted on MAULDROPPERS.COM on 12/18/10:

For those of us who live with deed restrictions preventing having a base antenna I have something to try. I've tried everything including a dipole which didn't work out, you may want to consider using the gutter.

To be clear, I did not invent this, hams have been loading gutters for years with good success.

I decided to try it and it works well for me. It's very simple actually. You run your coax outside to your gutter. At this point you strip the jacketing exposing the center conduction and the shield. Take the center conductor and solder an eyelet on it. Then take a self tapping (grabber) screw and screw it into the downspout. Glob silicone over this connection. The shield also gets an eyelet.

Now take four 9' pieces of wire and solder an eyelet to each. Take all these four eyelets plus the shield (with an eyelet) and fasten them together with a bolt & nut. Spread the radials out in different directions and bury them, keeping them stretched out.

Viola! you're done. You will need a small matcher to get the swr down. My swr UNmatched was 2.5. Matched it is dead flat. Use a small 1 or 2 pill box and you should get out just fine. Tonight I did a 10 mile trip no problem.

I am running a BotsBuilt 76 & a 2 pill Dave and all is well. I do come across my surround system (and probably everyone elses') but I'm sure ferrites will fix that

Below you will find a block diagram of how to do this. It's very simple and works surprisingly well. Just another alternative to a dipole AND it's 100% stealth. Even if you rip across someone's TV, they will never find you. And if any neighbor should challenge you over it...DENY it! Tell them you hear the same interference on your TV and that it must be a ham in the area! haha

Nice part is that when the ground gets covered with snow you really get out!

Diagram:

[https://docs.google.com/viewer?a=v&pid=explorer&chrome=true&srcid=0BxIsrq8lDRNuNDIxZmViMmEtOTAyZS00M2Q5LWE1ZGYtN2IwOWE2NzJiNGEx&hl=en&authkey=CO\\_GtOAE](https://docs.google.com/viewer?a=v&pid=explorer&chrome=true&srcid=0BxIsrq8lDRNuNDIxZmViMmEtOTAyZS00M2Q5LWE1ZGYtN2IwOWE2NzJiNGEx&hl=en&authkey=CO_GtOAE)

<http://i990.photobucket.com/albums/af26/andy3978/Gutter%20Antenna/3.jpg><sup>xxviii</sup>

Commenter:

To minimize the effects of Restrictions would be for the Commission to:

1. Study the effectiveness of common antennas which can be installed in a similar fashion as the OTARD devices with minimal sight effect.
2. Adopt something similar to the OTARD rule on Amateur Radio.
3. Develop an Arbitration type setup if any party not satisfied with the result with loser paying all legal costs.

**c. What steps can amateur radio operators take to minimize the risk that an antenna installation will encounter unreasonable or unnecessary private land use restrictions? For example, what obstacles exist to using a transmitter at a location not subject to such restrictions, or placing an antenna on a structure used by commercial mobile radio service providers or government entities?**

1. Unreasonable is a relative thing when speaking about aesthetics, what I consider beautiful and delightful might not be the next person's cup of tea. Reasonable accommodation might be as simple as using a low impact antenna such a hidden dipole or VHF/UHF disguised as a roof vent. I would follow the O.T.A.R.D. guidelines and adopt something low key yet unobtrusive.
2. Antennas such as the Butternut Vertical demonstrate that a workable HF alternative does exist to towers, VHF antennas can also be low impact, while beams are desirable, the low impact antenna might just be a Vertical VHF Antenna. Restriction to place the Antenna out of sight in the back yard might be a burden but a compromise in Aesthetics' will go a long way in creating Good Will with a neighbor.
3. To offset a transceiver at a location away from a residence or business is feasible but due to the cost involved, not very practical from the standpoint of a non-pecuniary radio service. Even if an offsite transmission area is found, the cost of Tower Rental or Antenna Rental as well as labor and equipment costs would rule out a general participation in Amateur Radio. Commercial structures usually charge at least \$75.00 per month as well require professional tower antenna person for maintenance and installation of the Antenna. Governmental agencies usually do not provide offsite Antenna sites to individuals but to clubs there are repeater sites in use on governmental sites throughout the United States and Canada.
4. The straight fact is illustrated by the following post in a popular website among Radio Amateurs which shows the pervasive manner of restrictions:

1. OK, once and for all can we lose the " well you bought into the HOA and signed contracts" argument BS. It is a horse well beaten to death, and in my opinion, holds no water. HOAs are almost the defacto standard for new housing. Many towns won't approve developments without it, and it is no guarantee for property values either. The fact is if you have an operational station 24/7 you are more likely to be involved in the activity, and

more likely to practiced and ready when needed. The equipment is 'tested' regularly and issues are fixed. If I only took out the HF gear 2x a year to test, I would still be in violation of "no antennas" 2X a year, and subject to fines. Not to mention having equipment that sits month on end, unpowered and un checked, when the SHTF, that unused equipment will see a higher failure rate then equipment used on a daily basis.

But seriously now, how 'blighting' is a simple dipole in the trees or a simple flag pole vertical? I am not advocating for stacked yagis on a 150' tower, that would be a little much, but wires in a tree?? How bad is that ? <sup>xxix</sup>

**d. Do any Commission rules create impediments to enhanced Amateur Radio Service communications? What are the effects of these rules on the amateur radio community's ability to use the Amateur Radio Service? Do disaster and/or severe weather situations present any special circumstances wherein Commission rules may create impediments that would not otherwise exist in non-disaster situations? What actions can be taken to minimize the effects of these rules?**

1. The PRB-1 herein should be revisited to define reasonable accommodation to prevent unnecessary hesitation to issue permits and create delays to hinder the intent of PRB-1.

PRB-1 As currently written:

#### **§ 97.15 Station antenna structures.**

**(b) Except as otherwise provided herein, a station antenna structure may be erected at heights and dimensions sufficient to accommodate amateur service communications. (State and local regulation of a station antenna structure must not preclude amateur service communications. Rather, it must reasonably accommodate such communications and must constitute the minimum practicable regulation to accomplish the state or local authority's legitimate purpose.**

**See PRB-1, 101 FCC 2d 952 (1985) for details.)**

**[64 FR 53242, Oct. 1, 1999]**

PRB-1 As should be revisited as to prevent any Municipality, Township or State for preventing an Antenna from being built to at least a certain height:

**(b) Except as otherwise provided herein, a station antenna structure Shall be allowed to be erected at heights and dimensions sufficient to accommodate amateur service communications. (State and local regulation of a station antenna structure must not preclude amateur service communications. Rather, it shall allow such communications and must constitute the minimum practicable regulation to accomplish the state or local authority's legitimate purpose for the purposes of protection of public safety. Not such regulation public or private shall preclude any installation of a station antenna under (45') Forty-five Feet in height.**

PRB-1 As should be revisited as to prevent any Private Restrictions for preventing an Antenna from being built to at least a certain height:

**(c) Except as otherwise provided herein, a station antenna structure Shall be allowed to be erected at heights and dimensions sufficient to accommodate amateur service communications. Any Property Restrictions that shall serve to inhibit the Operation, Installation or Maintenance of an Amateur Radio Station installed and operated under Part 97 shall herefore be declared against Public Policy. However, a height limitation and restriction that said Amateur Radio Antenna shall not exceed (45') Forty-five Feet without review shall be legal and enforceable.**

This enhancement would allow for a reasonable accommodation and end a great deal of the bickering over Amateur Radio which is in the public interest and convenience and necessity not only for Emergency Management but for the Well Being and Nation Security of the United States of America.

**e. What other impediments to enhanced Amateur Radio Service communications have amateur radio operators encountered? What are the effects of these impediments on them amateur radio community's ability to use the Amateur Radio Service? Specifically, do these impediments affect the amateur radio community's ability to respond to disasters, severe weather, and other threats to lives and property in the United States? What actions can be taken to minimize the effect of these impediments?**

This question has been answered by the other responses herein.

**f. The legislation requires the Commission to identify "impediments to enhanced Amateur Radio Service communications."7 What specific "enhance[ments]" to Amateur Radio Service communications have been obstructed by the impediments discussed above?**

The impediments found and discussed here cover this question and open up a dialogue into these matters and how the Commission and its Actions and Recommendations on these matters.

Respectfully submitted,

s/ *Martin D. Wade*

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<sup>i</sup> **See** Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6414 (2012).

<sup>ii</sup> **Ditto above.**

<sup>iii</sup> Meter Band is the Metric Designation of Spectrum and is used to commonly denote frequency vs. \_\_\_\_\_hertz or \_\_\_\_\_Cycles per second. Kilo=1000, Mega= 1 Million, Giga=1 Billion.

<sup>iv</sup> An Amateur Station that simultaneously retransmits the transmission of another amateur station on a different channel or channels. Part 97

<sup>v</sup>

5. <http://www.seattleyachtclub.org/files/FEMA%20Amateur%20Radio%20Guidance%20for%20Civil%20Emergencies.pdf>

<sup>vi</sup> <http://www.usfa.fema.gov/pdf/efop/efo37991.pdf>

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vii <http://training.fema.gov/> Emergency management Institute, FEMA Instruction.

viii See [http://www.lafourchegov.org/CONTENT/OEP/AllHazardPlan\\_Jul2011.pdf](http://www.lafourchegov.org/CONTENT/OEP/AllHazardPlan_Jul2011.pdf)

ix See Comments of Martin D. Wade, N5PZJ filed under EB Docket No. 06-119 with the Commission. Redacted herein in part.

x (RACES) an acronym for RADIO AMATEUR CIVIL EMERGENCY SERVICE as found under Part 97:401 of the Commission rules.

xi RACES STATION LICENSES were discontinued several years ago , they were [WC#XXX](#) in format and were held by the Civil Defense Agency as Trustee. As a distinctive call, the call stood out .

xii Engineer-in-Charge, as designated by Federal Communications Commission or his designate.

xiii **The Health Insurance Portability and Accountability Act of 1996 (HIPAA; [Pub.L. 104-191](#), 110 [Stat.](#) 1936, enacted August 21, 1996)**

xiv [www.arrl.org](http://www.arrl.org)

xv *Control operator.* An amateur operator designated by the licensee of a station to be responsible for the transmissions from that station to assure compliance with the FCC Rules.

xvi Would this involve a background check? Police Report? Security Clearance by what authority? Drug Screen? The information possibilities are staggering as to requirements. How do you do a background check with no Communications during an Emergency?

xvii Martin D. Wade, Notary Public, #014984, Lafourche Parish, Louisiana Commissioned Aug 2, 1982 FOR LIFE.

xviii Louisiana Notaries are able to draft any and all instruments of writing, contracts and receive wills, the Notary is the chief drafter of Land Deeds, Mortgages and Deed Restrictions. SEE LA R.S. 35.1 et seq.

xix Louisiana is a Civil Law State, the only one in the Union, however Puerto Rico also uses Civil Law also derived from the Code of Justinian of the Eastern Roman Empire, (Circa 550AD) via France and Spain, respectfully.  
The remainder of the United States uses Common Law derived from English Law.

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<sup>xx</sup> Liberative Prescription is the legal concept whereas a parcel of land is free of an obligation or agreement in Civil Law and no longer suffers under it burden.

<sup>xxi</sup> 47 U.S.C. 302 et seq. also see Conference report 97-765.

<sup>xxii</sup> The Restrictive Covenants of South Ellendale Estates Subdivision Addendum No. 1, Terrebonne Parish, Louisiana Conveyance Records.

<sup>xxiii</sup> THE BLUFFS SUBDIVISION, LAFAYETTE PARISH, LOUISIANA Conveyance Records.

<sup>xxiv</sup> AUDUBON LAKES SUBDIVISION, **PARISH OF EAST BATON ROUGE, LA.** <http://audubon-lakes.com/restrictions/detail.php?id=3>

<sup>xxv</sup> BEACON HOMES OF FLORIDA, INC., BEACON MEADOWS, Unit I, according to the Plat thereof as recorded in Plat Book 48, Pages 79-1 through 79-11, inclusive, Public Records of Hillsborough County, Florida

<sup>xxvi</sup> Restrictive Covenants of Village East Estates, Terrebonne Parish, Louisiana and filed under Entry Number 530443.

<sup>xxvii</sup> <http://www.forestpropertyowners.com/> Forest Property, Ft. Myers, FL

<sup>xxviii</sup> <http://www.mauldroppers.com/archive/index.php/t-13054.html> Posted 12-18-2010 7:40PM

<sup>xxix</sup> <http://forums.qrz.com/showthread.php?340809-FCC-Seeks-Comments-on-Impediments-to-Amateur-Radio-Communications/page13> post 126